

Claims:

1. A method for identifying items, such as sheets of paper (7), or packages, or textiles, in which method

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- a mark (6) made of electrically conductive material on the item (7) is read contactlessly with the aid of a measurement of alternating electricity, in order to identify the item (7), or determine its properties,

10 **characterized** in that

- the precise absolute or relative resistance value of one electrically conductive mark (6) is determined and the resistance value is converted, for example, with the aid of a coding table or calculation formula, into information depicting the identity or properties of the item.

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2. A method according to Claim 1, **characterized** in that, in connection with the measurement, a reference mark is read, the resistance value of which is compared with the resistance value of the mark (6) depicting the properties or identity of the item.

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3. A method according to Claim 2, **characterized** in that, in connection with the measurement, a reference mark, which consists of only electrode areas (2 and 3), is read.

4. A method according to any of the above Claims, **characterized** in that the measurement is implemented by feeding an electrical field to the conductive mark with the aid of a first pair of electrodes (4, 5) and measuring the resistance value of the conductive mark with the aid of a second pair of electrodes (2, 3).

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5. A method according to any of the above Claims, **characterized** in that a conductive ink is used as the material of the conductive mark.

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6. A method according to any of the above Claims, **characterized** in that a conductive polymer is used as the material of the conductive mark.

7. A method according to any of the above Claims, **characterized** in that part of the conductive mark is made by printing methods and part by output methods.

5 8. A reading system for a electrically conductive mark (6), which apparatus includes means for measuring impedance contactlessly,

- the system includes means (10, 16, 17) for feeding alternating electricity measurement power contactlessly to one electrically conductive mark (6),
- 10 - means (11) for determining a signal formed of the electrically conductive mark (6),

characterized in that

- 15 - means (12, 13, 14, 15) for determining the precise absolute or relative value of the resistance component of the single electrically conductive mark (6) from this signal, and
- means (15) for decoding the resistance value of the single electrically conductive mark (6) to form code information for the conductive mark (6).